

IN THE U. S. PATENT AND TRADEMARK OFFICE

In re application of

Silvia MARABINI

Conf. 7780

Application No. 10/509,619

Group 1797

Filed: September 29, 2004

Examiner Jan Ludlow

Title: ANALYZER FOR AUTOMATIC RAPID ANALYSIS OF THE ACETALDEHYDE  
CONTENT OF PET PRODUCTS, PARTICULARLY PREFORMS, AND ITS  
OPERATIVE PROCESS

DECLARATION UNDER RULE 132

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

I, Carlo SQUICCIARINI, hereby declare as follows:

I am the named inventor of the cited reference, US  
2003/021731 A1 ("US '731"), which has been applied a prior art  
against the pending claims of the above identified application in  
the Official Action mailed November 13, 2009.

I have read the Official Action, and I have reviewed  
the present application and pending claims. The Official Action  
rejects claims 6-9 under 35 U.S.C. 102(e) based on US '731 alone.  
Claims 1, 4 and 5 are rejected under 35 U.S.C. 103(a) based on US  
'731 in combination with Andrews et al. WO 01/02489 and Treece et

al. US 5,968,429, and claim 3 is rejected further in view of German et al. US 4,471,647. The Official Action, however, does not recognize the differences between the presently claimed invention and US '731, and the advantages resulting from these differences.

I describe these advantageous differences in detail below:

PET SAMPLE

According to the present invention, the PET particles, in whatever form (as actual articles, or as granules or particles of the material) are placed directly into the desorption cell, e.g., independent claim 1.

The cell is scavenged with air, and the sample is heated in the cell. The cell is pressurized, and then a loop is charged with gas from the cell, which is transferred from the cell to a gas chromatography column, and then to an acetaldehyde detector, e.g., the method of independent claim 1 and analyzer described in claim 6.

This is a direct method, in which the sample itself is placed in the heating cell.

The present invention is, thus, in sharp contrast to the method of US '731 in which the cell receives tubes or vials that have been sealed through a ring carrying a pierceable

septum. Then, the septum is perforated by a needle, in order to transfer the gas to be analyzed into the cell.

In sharp contrast to US '731, according to the present invention, it is not necessary to prepare the tubes within the gas to be analyzed. It is sufficient to put the preforms or the other samples of PET directly into the cell.

For this reason the apparatus of the present invention is more efficient and the measurement is carried out more quickly than the apparatus of US '731.


#### WASHED WITH AIR

Using air for scavenging the desorption cell, instead of other gases, the present invention is cheaper and simple to operate than US '371.

#### INCUBATION, HEATING, AND TRANSFER BY HYDROGEN

Incubation heating and the use of hydrogen as a transport gas are peculiar characteristic of the present invention not taught by US '731 or the other cited documents.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under §1001 of Title 18 of the United States code and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

  
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Carlo SQUICCIARENI

07 - 07 - 2010

Date